

Boilerplate MOU: Formulators-“Commercial Cleaning”

MEMORANDUM OF UNDERSTANDING BETWEEN [FORMULATOR COMPANY] AND U.S. ENVIRONMENTAL PROTECTION AGENCY DESIGN FOR THE ENVIRONMENT PROGRAM

1 Statement of Purpose

The purpose of this Memorandum of Understanding (“MOU”) is to set forth the basis, terms, and goals of the Design for the Environment (“DfE”) Program voluntary partnership between [Formulator Company] (“company name”) (Location) and the U.S. Environmental Protection Agency (“EPA”). The partnership is part of a DfE safer chemical use initiative for commercial formulators. The basic goal of the initiative is to seek, assist, and promote innovative chemical products, technologies, and practices that benefit human health and the environment.

A key purpose of the [company name]-EPA/DfE partnership is to recognize and encourage the environmentally preferable chemistry exemplified by the following [company name] products: [product names] (“the partnership products”). The partnership will strive to promote and advance the environmental, technological, and efficiency benefits of these and future partnership products.

This MOU describes in general terms how [company name] formulates the partnership products, their environmental and human health benefits, and how [company name] and the EPA/DfE will work together to continually improve their health and environmental profile and expand their use.

2 Statement of Context and Challenge

{Specific challenges, contexts, or motives for change should be discussed here.}

Each year, commercial formulators use billions of pounds of chemical ingredients to make a wide variety of general purpose and specialized cleaning products; ultimately, through use the chemicals in these products enter the environment. The EPA is concerned about the effect these chemicals might have on environmental quality and on the health and safety of workers and the public, who use cleaning products or may come in contact with them.

Cleaning product formulators can improve the environmental and health profile of their products by using ingredients that are inherently less toxic, less environmentally persistent, less bioaccumulative, and that degrade to substances with similar desirable characteristics when compared to ingredients in conventional formulations. Environmentally oriented reformulation coupled with energy efficiency, resource conservation, and sound management practices offer the components for measurable and sustainable improvement in cleaning products and programs.

Conventional cleaning formulations, especially those for industrial/institutional (“I/I”) use, often rely on a number of ingredients whose environmental and human health profiles can be improved. For example, highly alkaline chemistry, commonly a base for I/I cleaners, is corrosive, posing a threat to health and the environment. Many solvents are problematic: the ethylene glycol ethers (e.g., ethylene glycol methyl ether and ethylene glycol monobutyl ether) raise many human health concerns, including potential blood, kidney, reproductive, and central nervous system effects. Certain terpenes present both human health and environmental concerns, especially for their potential toxicity to aquatic organisms. Other solvents pose environmental hazards because of their low flash point or high volatility.

Some common surfactants, like the nonylphenol ethoxylates, biodegrade to compounds that are more aquatically toxic than the parent, persist in the environment, and may disrupt endocrine systems (responsible for metabolism, reproduction, and growth). Concentrated chlorine is very caustic and volatile and may react with other compounds, posing a risk to workers, and if released to the environment, is toxic to aquatic organisms.

Fragrances, although typically a small percentage of most formulations, contain ingredients that raise a number of potential health and environmental concerns, including sensitization/allergic response, neurotoxicity, cancer, and environmental persistence. A

number of fragrance ingredients may induce occupational asthma.

3 [Company name]’s Improved Cleaning Chemistries

[Company Products]

[Company name] has developed an improved set of cleaning products for the [name sectors]. For [name user facilities], [company name]’s products offer a number of health and environmental advantages over conventional formulations. They contain no inorganic phosphates, chlorine bleach, hazardous solvents, or environmentally harmful surfactants, common to most detergents and cleaners. Instead, [company name] substitutes a proprietary blend of surfactants, sequestrants, solvents, builders, and other ingredients, which exhibit more positive environmental and human health characteristics.

The partnership products only use surfactants that biodegrade readily to non-polluting substances, which helps relieve stress on the environment, especially threats to aquatic life. By not including caustics, chlorine, and harmful solvents and sequestrants in these formulations, [company name] further enhances their environment-friendly profile and safety characteristics. For example, an inorganic phosphate-free formula may promote a better balance of nutrients in the environment and healthier fresh water bodies. Safer sequestrants biodegrade readily to non-hazardous compounds and protect against environmental loading of metals. Mild pH formulas help protect workers, the environment, and building infrastructure. (For more information on the attributes and benefits of these products, see section 7.)

Please Note: EPA/DfE relies solely on [company name], its integrity and good faith, for information on the composition, ingredients, and attributes of the partnership products. EPA/DfE has not independently identified, i.e., via chemical analysis, the ingredients in the partnership formulas, nor verified any of [company name]’s claims concerning the efficiencies or performance of these products. EPA/DfE expresses its judgment and professional opinion only as to the environmental and human health characteristics of the partnership products. [company name]’s obligations under any federal, state, or local regulations governing the company or these products are in no way altered by its partnership with EPA/DfE.

4 [Company name]’s Commitment to Formulate for the Environment

As part of the [company name]-EPA/DfE partnership, [company name] agrees to formulate and produce the partnership products using only ingredients with a more positive health and environmental profile than those in conventional products. To preserve the non-confidential nature of this document, a generic description of the ingredients in the partnership products and their key characteristics appears below.

As documentation of the partnership products at the time of this MOU, and to set a baseline for future improvements and formula changes, [company name] has provided to EPA the specific and complete chemical composition for these products. This section's ingredient-by-ingredient descriptions are intended to serve as surrogates for the actual formulas. [Company name] reserves the right, however, to change ingredients provided that their health/environmental profile is equal to or better than those in the current formulations and that any substitution occurs in consultation with EPA (see section 11).

[Company name] will make available to the EPA the composition of the partnership products on an as-needed basis or whenever a substantive change in formulation occurs (e.g., addition or deletion of an ingredient). EPA will keep confidential all product formulas and other proprietary information that [company name] furnishes to the Agency (see section 10).

The following is a non-confidential representation of the ingredients in the partnership products, with their key characteristic (including green chemistry status or need for improvement), as evaluated by EPA/DfE:

	<u>Ingredient</u>	<u>Key Evaluation Characteristic</u>
[Product name]	Surfactant A	Readily biodegradable, low concern for byproducts
	Surfactant B	Readily biodegradable, low concern for byproducts
	Sequestrant	Does not contribute to eutrophication in fresh water
	Solvent	Low concern for health/environmental effects
	Fragrance	More positive profile
	Colorant	Some potential health concerns (see sec. 5)

Adoption and use of the formulations described in this MOU does not preclude, nor should it impede, [company name] in its efforts to further improve the health and environmental profile of the partnership products. In fact, a main element of the

[company name]-EPA/DfE partnership is to provide [company name] the opportunity to work with EPA chemists, environmental scientists, and risk reduction staff in investigating materials to further improve the health and environmental profile of its products.

5 Continuous Environmental Improvement

[Company name] will make continuous environmental improvement an important element of its research and development activities. EPA/DfE recognizes the many challenges companies face in reformulating their products. Changes in product formulation must be undertaken cautiously and in increments so as not to alter the important interactions among ingredients and ultimately performance and customer satisfaction.

In addition to the environmentally oriented formulations set forth in section 4, [company name] agrees to investigate the feasibility of making additional improvements in the environmental and health profile of the partnership products. Specifically, [company name] will consider use of an alternative [colorant (or use no colorant)], as recommended by EPA/DfE. [company name] will undertake this formulation review within ____ months from the date of signature of this MOU.

[Company name] agrees to explore, on an on-going basis, ways to further improve the health and environmental profile of its chemical products. [Company name] may consult with EPA/DfE about other products in its line and, following Agency review and assessment, may request that one or more be added to this agreement. With EPA/DfE's approval, this MOU may be amended as set forth in Section 11.

[Company name] and EPA/DfE agree to discuss on a [yearly] basis the status of [company name]'s reformulation research and continuous improvement activities. [Company name] may, at any time, request consultation and technical assistance from EPA in determining which chemical ingredients possess more positive health/environmental characteristics. [Company name] may use the DfE's Considerations for Partnership paper and other informational materials from its website www.epa.gov/dfe/projects/formulat/) as general guides to environmentally desirable attributes for cleaning products.

6 Formulator Right to Know

Cleaning product formulators have a right to know the properties and potential

risks, to their employees and communities, of the chemicals they use. Manufacturers of raw materials for detergents and other cleaning products should ascertain and communicate the properties and potential toxicity of their products, especially those made and sold in large quantities.

As part of its partnership with EPA, [company name] agrees to ask its raw material suppliers for test data on the chemicals they sell and that [company name] uses in its products. If the raw material suppliers do not have test data on their chemicals, [company name] shall encourage them to perform basic physico-chemical and toxicity testing. To help ensure that any new testing serves to enhance the profile and general understanding of a particular chemical, all prospective studies should be considered in the context of the guidance offered in EPA's High Production Volume Challenge Program (see <http://www.epa.gov/chemrtk/volchall.htm>) and the Screening Information Data Set (SIDS) Program of the Organization for Economic Co-operation and Development (to learn more, visit <http://www.epa.gov/oppt/chemtest/oecdside.htm> and the SIDS Test Guidelines at <http://www.epa.gov/chemrtk/sidsappb.htm>).

[Company name] will share with EPA any chemistry or toxicity information on its ingredients that it obtains from its suppliers. Based on this information, [company name] will consider product reformulation, revisions to its product informational materials, and warning statements, as appropriate.

7 User Benefits

[Company name]'s [product name] offers users the following set of benefits:

{Example for general cleaning products}

Environmental Protection

The partnership products are formulated with the environment and human health strongly in mind. Their ingredients have a more positive profile than those in conventional cleaning products. Of note, the partnership products use the following types of ingredients: biodegradable surfactants, with byproducts that are less toxic than the parent compound; builders and sequestrants that are not environmentally persistent and do not contribute to oxygen-depletion in fresh water bodies; solvents that are not hazardous air pollutants and pose no threat to the Earth's ozone layer; fragrances that have been screened for potential hazardous and persistent ingredients; and other components with a more positive environmental profile.

Worker/Consumer Safety

The partnership products are also formulated to help ensure a safer workplace. Users of these products benefit from ingredients that include no chlorine, ammonium, caustics, or any strong, volatile solvents, common cleaning product components that pose serious hazards. This benefit is amplified for janitors, maintenance staff, housekeepers, and others who must use cleaning chemicals in confined spaces on a daily basis. Importantly, a safer health profile especially benefits children, who spend a large part of their day in indoor environments and can be particularly sensitive to the chemicals in cleaning products. Also, the mild pH, low volatility, and low potential to catch fire enhance the safety profile of these products.

Resource Conservation

Product attributes that decrease potential risks to workers, e.g., mild pH, no chlorine bleach or harsh solvents, also significantly reduce wear and tear on substrates, fabrics, and other surfaces with which the products come in contact, extending their usable life.

Customer Education

[Company name] acts as a product steward by sponsoring customer training sessions with information on environmental and worker safety matters. [Company name] also trains its sales force on the benefits of formulations with improved environmental and health characteristics.

[Company name] agrees to inform partnership product customers about the [company name]-EPA/DfE partnership and their role in helping to protect health and the environment. [Company name] will make available to its customers an EPA contact to whom they may direct questions or comments on the partnership.

8 EPA Recognition and Support

[Company name] may use the Design for the Environment logo (but not the official U.S. EPA logo) or any EPA statement of recognition or support on containers of the partnership products or on advertising specifically related to these products, provided that EPA has had an opportunity to review and comment on the intended use. [Company name] may only use the DfE logo or EPA recognition for a DfE-recognized product and not on any general [company name] materials, non-DfE-recognized products or literature, or advertising not related to the partnership products. Use of the DfE logo must be accompanied by an explanatory tag line, for example, “Formulated in Partnership with

the Design for the Environment Program,” or similar words agreed to by EPA/DfE.

EPA/DfE recognition does not constitute endorsement of the partnership products; the recognition signifies that the formulas for these products, as [company name] has represented them to the Agency, contain ingredients with more positive health and environmental characteristics than conventional cleaning products.

[Company name] will make available to EPA for review and comment any materials, including promotional letters and advertisements, that [company name] develops in connection with the EPA/DfE-[company name] partnership, and especially information that describes or characterizes the DfE Formulator Program or EPA’s position on issues related to the [cleaning product] sector. [Company name] may request EPA assistance in reviewing and editing materials about the partnership products and the partnership in general.

[Company name] may extend EPA/DfE recognition to partnership product customers. To help in this process, DfE will provide [company name] with an EPA customer-recognition letter and support in developing a certificate of recognition or other forms of customer recognition.

[Company name] must discontinue use of the DfE logo or any other form of recognition, within 30 days, under the following circumstances: If [company name] stops formulating the partnership products using ingredients with a more positive health/environmental profile; upon the termination of this MOU; or, if so notified by EPA in writing.

EPA may disseminate non-confidential information about the partnership in various media, including fact sheets, presentations, and website. Either [company name] or EPA may issue a press release containing general information about the partnership and MOU.

9 Measures of Success

On an annual basis, [company name] will provide to EPA/DfE its best estimate of the quantities of conventional ingredients replaced by the partnership products (if possible, both in aggregate pounds or gallons and broken out by component class, e.g., surfactant, solvent, etc.).

At EPA's request, [company name] will make available to the Agency, on a confidential basis, formulation bills of materials that confirm that the partnership products contain the ingredients agreed to in this MOU or have been modified in accordance with its terms.

[Company name] will make reasonable attempts to monitor the cleaning product market and will inform the Agency about the partnership products' influence on the market, including growth in sales and number of new customers, as well as customers' perceived value in DfE recognition. [Company name] will report on customer acceptance of and satisfaction with these products when this information is available.

As discussed in section 5, [company name] will furnish periodic updates to EPA on the continuous improvement component of its research and development activities and on its ongoing efforts to improve the health/environmental profile of the partnership products. [Company name] will also share the results of any performance testing on these products.

10 Confidentiality

In matters relating to this DfE partnership and MOU, EPA agrees to handle all information claimed by [company name] as confidential business information in accordance with Agency confidentiality procedures (see 40 CFR part 2, subpart B). EPA and [company name] agree that information supplied to EPA by [company name] on the formulas of any [company name] products is covered by the foregoing sentence.

EPA/DfE will only use the information provided by [company name] for purposes related to the [company name]-EPA partnership/MOU and will disclose the information only to EPA employees and EPA contractors cleared for confidential information with a specific need to know.

[Company name] will maintain a copy of all confidential materials related to the [company name]-EPA/DfE partnership as records for the life of the partnership. On an as-needed basis, [company name] will provide the Agency copies of partnership records, including sanitized versions suitable for public disclosure.

11 Amendments to the MOU

As discussed in the Continuous Environmental Improvement section, [company name] may request that EPA/DfE add other products to this MOU. If EPA agrees to the addition, [company name] may amend the MOU by submitting a letter that addresses the essential elements from sections 3, 4, 5 and 7 of the current MOU. [Company name] and EPA/DfE will collaborate in developing the specific language for the amendment, which must be signed by an appropriate [company name] official. All other provisions of the MOU shall be incorporated by reference.

12 Termination or Renewal of the MOU

If either [company name] or EPA has reason to believe that the other is not fulfilling the terms of the MOU, either party may take the following actions: Provide written notification stating a basis for the concern and providing a reasonable time to respond or remedy the situation. [Company name] and EPA should make reasonable efforts to resolve the issues to their mutual satisfaction. Otherwise, at its discretion, either party may upon written notification terminate the MOU and all commitments and privileges will cease (within 30 days) without further obligation.

In any event, the terms and provisions in the MOU will sunset three years from the date of signature, unless the parties renegotiate and renew a partnership agreement prior to the expiration date.

We agree to these terms and provisions:

For [Formulator Company]

For the U.S. Environmental
Protection Agency

[Company Official]
[Title]

Charles M. Auer
Director, Office of Pollution
Prevention and Toxics

Date _____

Date _____